Earthquake and relevant insurance in China

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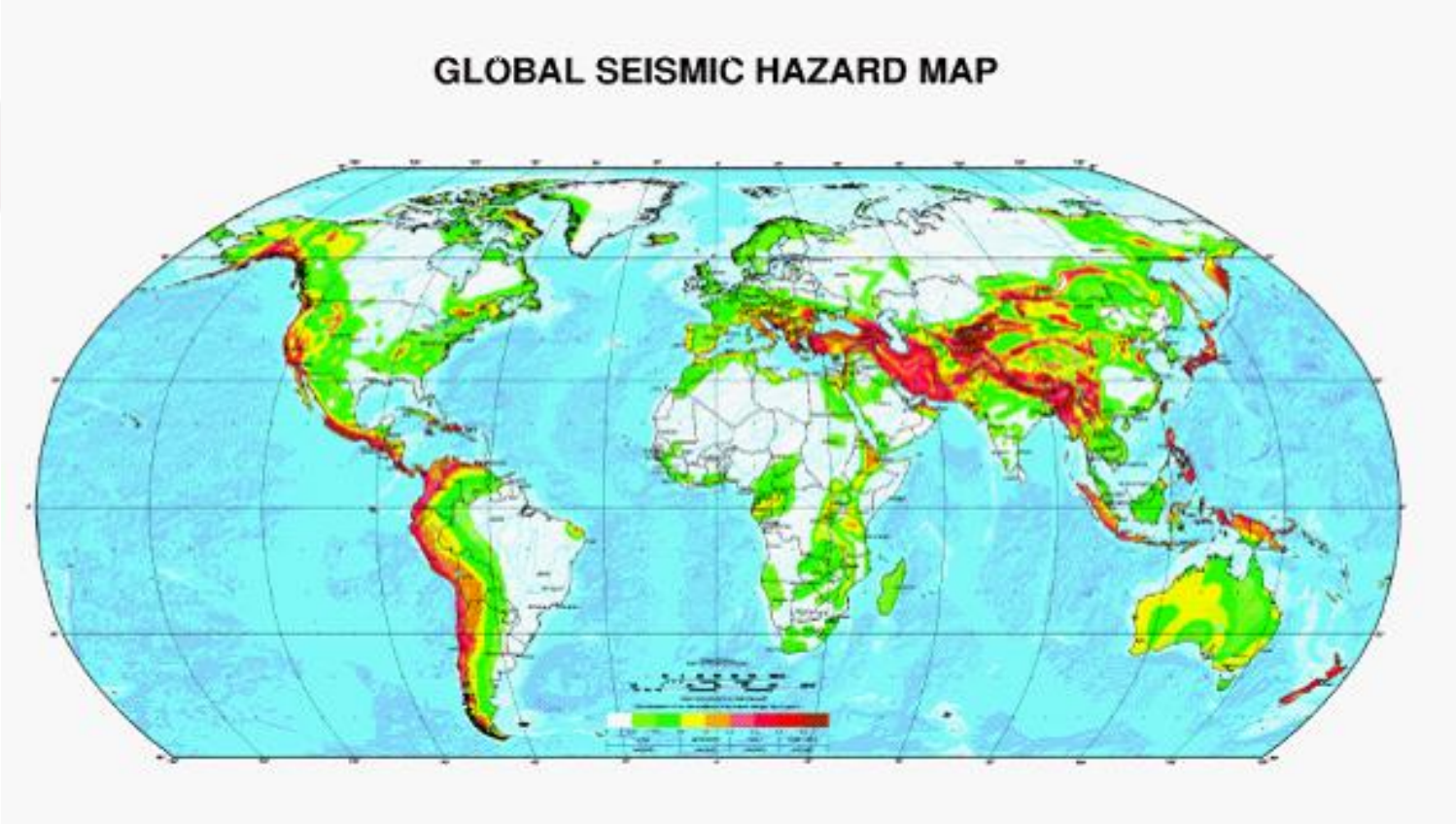
PREFACE

Dear Mr.F.A.I.R Secretary General, Ladies and Gentlemen, Tongzi,

An Niong Ha Sim Ni Ga! I am very glad to be your amazing Pyongyang again and deliver a speech on catastrophe risk like earthquake, and I hope we can get closer and closer through this Seminar. China Communist Party and Korea Labor Party, and the two governments have traditional deep friendship, as a member of China insurance industry, with long good cooperation with our Korean partners, I would like to take this opportunity to express my sincere thanks to Korea National Insurance Corporation’s earnest invitation and gracious hospitality. Please allow me to extend all my best wishes for the friendship of China and Korea. I wish all people perfect health and lasting prosperity. I wish this Seminar a complete success! My following speech topic is:

Earthquake and relevant insurance in China

I. Catastrophe earthquake



(from GSHAP,Global Seismic Hazard Assessment Program)

With continuous development of the world economy, through industrialization and globalization, mankind is enjoying a higher and higher living standard and accumulated wealth which in recent years have been facing more serious damages and losses in natural catastrophe. Catastrophe earthquakes in the regions of pronounced human activities, as devastating natural disasters, could trigger landslides, ground fissures, fire, floods, explosions, mudslides, the spread of poison gas/plague/radioactive substances, as well as subsequent tsunamis, avalanches, resulting in serious loss of life and property. In recent years, the 2008 catastrophe earthquake in China and the 2011 catastrophe earthquake in Japan had shocked the world, and also brought great challenge to the world insurance industry. Hereafter, I will give an introduction on the catastrophe earthquake and relevant insurance in China.

Japan catastrophe earthquake in 2011

(From:Xinhua News Agency)

At 14:46LT on 11 March 2011, in the west Pacific Ocean near Japan, a Richter magnitude 9.0 earthquake/epicenter depth of 20 km occurred, triggered great tsunami, , resulting in 11,168 people killed, 16,407 missing, and heavy casualties and property loss near USD210 billion.

China catastrophe earthquake in 2008 (From:Xinhua News Agency)

II. Losses and insurance compensations in the China earthquake

China has vast territory which is between the circum-Pacific seismic belt and the Himalayas seismic belt. 60% of her territory, 50% of her cities, is located on over VII magnitudes area (by seismic intensity, MM12 system). Nearly a century in China, there was 10 earthquakes above Rither magnitude 8, more than 100 earthquakes around 7-7.9, resulting in huge casualties and economic losses. At present time, 4 kinds of catastrophes, including earthquake, floods, typhoons and drought, have been the main natural catastrophe in China. China National Bureau of Statistics are calculating the catastrophe losses in three categories：life casualty, property loss and environment damage. At 14:28LT on 12 May 2008, China catastrophe earthquake occurred in position 30.986 ° N/103.364 ° E, with epicenter depth 14KM, the Richter magnitude 8.0, epicenter intensity of 11 magnitudes. The stricken area is nearly 500,000 square kilometers, in fact, it was the most serious earthquake for New China. The losses in the earthquake are as follows:

2.1 Loss in the earthquake
2.1.1 Loss of Life and Injury

Serious life & Injury loss (From:Xinhua News Agency,2008)

According to public data of the Chinese Ministry of Civil Affairs, till 12:00LT on 25 September 2008, it had been confirmed that 69,227 people were killed, 17,923 people missing.

By the report of the Ministry of Health ended till 12:00LT on 22 September 2008, due to earthquake injury hospitalization accumulated 96,544 people (not including the patient number in the disaster areas), and 4,273,551 wounded people got medical treatment.

According to the statistics from the PLA (the People’s Liberation Army) at 12:00LT on 25 September 2008, salvage action has been accumulated to rescue and transfer of 1,486,407 people.

2.1.2 Property Loss

By China government statistics on 4 August 2008, the collapsed and serious damaged houses involved nearly 4.5 million families, more than 10 million people became homeless; disaster area is nearly 500,000KM2, which was amounted to a direct economic losses of RMB845 billion. In property loss, 27.4% are the loss of city and urban houses, including 20.4% as the loss of schools, hospitals and other non-residential buildings. In addition, those infrastructure losses of roads, bridges and other urban infrastructures, accounting for 21.9%. These three kinds of loss took more than 70% share in total loss.

Property Loss (From：Xinhua News Agency)

2.1.3 Environment damage

Quake lake is forming
(From:Xinhua News Agency)

Environment were seriously damaged in the Chinese earthquake, the disaster areas covered 186 counties/districts. According to satellite observing results, a number of lands, roads, rivers, bridges, mountains, farms etc, were destroyed by the earthquake, landslides, mudslides, collapse or sink, relevant environment had been severely damaged, and it even formed 34 quake lakes which threatened further to the area.

2.2 Insurance compensations

2.2.1 The governmental guidance of China Insurance Regulatory Commission

To the earthquake in 2008, the China Insurance Regulatory Commission launched policy guidance to relevant insurance claims：
"Special claiming, Special handling". CIRC leaders went to the disaster area for site guidance, stressed “Individual claims as priority, simplify procedures as possible”, “first life & injury claims, then the property”. Furthermore, to any claim by the insured, whether it was a company’s insurance policy or not, firstly to be filed, and then to transfer to the actually insuring company.

2.2.2 Insured risks and losses

By statistics of the China Insurance Regulatory Commission, till 10 May 2009, the insurance industry handled a total of 239,000 claims, relevant clearance rate was 96.7%; the compensation amounted RMB1.66 billion, including pre-paid compensation of RMB497 million, which covered a number of death persons 1.29 million, the disabled 743 and the injured 3343.

However, there is no independent earthquake insurance in China, insurance compensations were mainly generated from life insurance, property insurance and other insurance relating to the earthquake risk. According to the summary of Chinese insurance industry, there were 6 kinds of risks covering the earthquake loss, including enterprise property insurance, insurance of contents/rural house insurance, contractos/erections insurance, personal accident insurance, health insurance and life insurance.

The majority of life insurance didn’t put earthquake risk in the "exclusion clause". As to life insurance contracts, whether long-term life insurance, or short-term personal accident insurance, health insurance, all personal injury or death caused by the earthquake could be compensated, which was including: term life insurance, life insurance, personal accident injury insurance, personal accident insurance, student safety insurance and travel accident insurance. Under these contracts, the death, disability and some medical expenses were to be compensated.

As to property insurance contracts, most of which had put earthquake risk into exemption clause, except for a small number of contracts on enterprises and rural house attaching additional earthquake provisions, there was only a lower amount compensated. For example, by 10 May 2009, all insurers paid total RMB182 million for 288,000 rural houses.

A few insurers’ policies on contractos/erections insurance,,covered expanding earthquake risk, by construction all risks and its third party liability insurance, installation risk and its third party liability, relevant loss will be compensated.

The domestic cargo insurance covered the earthquake risk, which had paid a considerable amount for the earthquake.

On vehicle insurance, earthquake risk was put exemption, and there was also no expanding clause covering the risk. However, the vehicle insurance did cover the losses caused by falling objects eve in the earthquake, but owners had to provide relevant proof.

Cargo loss in earthquake（from CNS photo）

2.2.3. Claims handling

To the claims of earthquake loss, China insurance industry followed CIRC’s guidance of “Special claiming, Special handling”. Insurance industry gave quick consulting replies and explanations, not only by phones and site but also by different kinds of media, on what risks products can be claimable and compensated, what procedures needed. Be aware of many students and farmers/rural residents in the disaster area, all insurers took active principles of “Individual claims as priority, then groups”, “first life & injury claims, then the property”, stressing on important attentions to students, rural residents and their houses.

Life insurance got quickly compensated. Generally, life insurance products covered earthquake risk. According to the guidance of “Special claiming, Special handling”, a number of main life insurance products gave a quick compensation within 24 hours, such as travel risk, safety risk, accident risk, personnel injury risk and student risk. However, there were a small number of cases failed to close, because some missing persons could not be contacted.

Lost insurance policies could be also claimable and compensated.

Life Insurance companies generally will reserve particulars of customers at least for 20 years. Therefore, once the customer was able to provide basic information of the policyholder's name, sex, age, even the claimant could not produce their original insurance policies, they really could get compensation after verification. In some cases, the insured family all were killed, in accordance with the procedures of the claims, regulations of the law, insurers also actively to find those legitimate beneficiaries. In an insurer’ s handling, the insured family are killed, the aunt of the family came to claim, in this situation, by verifying the identity and confirming the relevant claims procedures, a compensation of RMB40,000 was paid to the aunt in time.

Significant funds were prepared. Insurance companies supplied their branches in disaster areas with enough funds, as a pre-compensation and fast payment sources. Simplifying the claims procedure, all insurers put earthquake claims in priority to start or fasten the compensation, including a prepaid compensation mechanism. To those who could not provide all claiming documents temporarily, once insurers confirming the main responsibility, all were pre-paid 80 percent of compensation, to promote reconstruction, to resume production.

To those damage and loss on rural houses insurance, insurers found coordination and cooperation by local government to ensure that the insured timely received compensation. To a certain percentage which had to arrange survey to assess the damage extent, insurers just timely organized professional and technical surveyors to speed up the loss assessment, especially made a portion of pre-paid compensation to help policyholders to start reconstruction.

As to ordinary enterprise property insurance and insurance of contents(family), there was not included in main risk, but only additional coverage on earthquake; In house mortgage insurance, earthquake risk was belong to the exemption. Meanwhile, when individuals were purchasing property insurance, they had to follow the standard insurance policy and its wordings which would not cover earthquake risk at first. Enterprise property insurance would be suggested for additional earthquake risk. However, seldom enterprise and individual had insurance on additional earthquake risk. In fact, those little insurance policies with additional coverage of earthquake had to face difficulties to confirm the loss amount of recovery engineering in a short time and have to wait for a quite long period. Therefore, there was only a little compensation paid in a quick time.

III. History, present problems and research on solutions.

In China, earthquake compensation are mostly burdened by government, commercial insurance is relatively a small contribution to the compensation. Generally, it is still a system of strong government, participating social forces and supplementary insurers.

3.1 The course of development

In China, it was a journey full of twists and turns to develop insurances on earthquake. In the early 1950s when new China was founded, the State Council promulgated the "property compulsory insurance regulations “, PICC (the Chinese People's Insurance Company)" lunched “fire insurance clauses " which included earthquake risk, which created a package responsibility in property insurance, and covered 70% of all enterprise assets and 40% of all family properties.

From 1959 to 1979, China stopped the domestic insurance. However, insurance was gradually restored from 1979 to 1996 in which Chinese insurer provided to state-run companies and public faculties, with enterprises property insurance, contractors/erection insurance, vehicle insurance, hul&machinery insurance and cargo insurance, as well as providing to individuals insurance of contents (family) and to farmers-agricultural insurance. All these insurance followed package property insurance clauses covering earthquake risk.

With developing China market, lack of scientific actuarial basis and serious earthquake loss would hurt healthy development of insurance industry; in 1996 earthquake risk was deleted from the main clauses of insurance policy, and only regarded as an additional coverage.

In October 2001, the CIRC issued the commercial property insurance expansion of the earthquake responsible for guiding principles, and further relaxation of underwriting restrictions, and underwriting, reinsurance arrangements, financial management and other aspects of the specification requirements. In 2010, a full cessation of responsibility for the expansion of earthquake insurance.

3.2 Underwriting conditions of the additional earthquake insurance.

China earthquake additional coverage must attach to property insurance. It generally stipulated that it was covering property loss in the nominated premises, caused by direct result of a devastating earthquake (Richter magnitude 4.7 and above, the earthquake intensity of 6 degrees or more) or subsequent tsunami, fires, explosions and landslides. The premium rates, were charged according to the standards for buildings and location, on which the building were divided into 4 grades by the anti-seismic standards：

Class 1 for earthquake-proof buildings, or strengthened, or best quality.

Class 2 for good quality buildings without earthquake-proof facilities;
Class 3 for the moderate quality buildings without earthquake-proof facilities;

Class 4 for less good quality without earthquake-proof facilities.

Furthermore, according to the buildings height, materials, age, construction quality, site conditions, insurance density and other factors to determine the final premium rate. The highest premium rate is the Class 4, the lowest Class 1.

However, considering of the high risk, less insurance companies would like to recommend customers with additional earthquake risks, meanwhile, when customers applied for additional earthquake risk, it had to get approval from insurance companies. In fact, only a few insurance companies such as Pacific Property Insurance, Hua An Property Insurance, who had run it in a short period with limit clients. Even insurers aimed at a additional rate of 20% -30%, but actually rate might be only 10% of the main insurance。 Due to poor market response, main insurance companies in China did not take an active step.【It is introduced that the same period in Japan, additional earthquake rate 30% -50% higher than property insurance, maximum buildings insured amount was JPY 50 million, the house hold property JPY10 million. However, according to the U.S. risk assessment firm AIR Worldwide, in the Japanese market, residential and commercial earthquake insurance sales was relatively low, only 14% to 17% of households and businesses buying this insurance.】

3.3 Present difficulty and problem to expend the insurance on earthquake

3.3.1 Insurance demand for arthquake

China have been facing frequent earthquake disasters, risk management on earthquake disaster closely related to all the government, the insurance industry, enterprises and residents. Along with economic development, earthquake property insurance is also facing greater demand. Since commercial insurance system is involving a wide range of social services with a numerous people, there is really an opportunity to expand relevant business. For instance, the house price is increasing quickly, people are most concerning about these most important assets what have been the main properties of most families, however, a catastrophic earthquake may destroy it in seconds and make them homeless. 【It is learnt that in the developed countries with sophisticated earthquake insurance, a large proportion of the insurance is on earthquake insurance, as well as property insurance and insurance of contents.】

3.3.2 Present difficulty in China

China is one of the largest developing countries, her per capita income is still in a very low level, although have the desire to expand insurance to earthquake risk, but have to see and research many difficulties and problems carefully which are mainly as follows:

3.3.2.1 Earthquake loss data is still not sufficient. To determine earthquake insurance rates need having accurate data and analysis. Some insurance companies expanded the additional terms earthquake only by simple consideration from experiences, but not a scientific calculation which is reflecting an inferior risk management level.

3.3.2.2 Lack of fund preparation. First, the lower income level gives a less premium support. For instance, in some earthquake disaster, the per capita net income of farmers was RMB5300, urban residents RBM11,600. Except for basic living expenses, they could afford little to relatively high earthquake insurance. Residents in disaster area have a high demand to have insurance, but not those in disaster area on the contrary. Secondly, without special fund support, no single commercial insurance company can afford huge earthquake losses, which have to need the government fund to be the ultimate support.

3.3.2.3 There is disorder competition in China insurance market, whose product homogeneity with irrational discount, result in reducing income of insurance premium for less share so as not to successfully transferring the risk to international reinsurance markets. China Reinsurance (Group) Company, mainly expand business in accordance with the provisions of the Insurance Law from Chinese insurers, few beyond the scope involving earthquake risk.

3.3.2.4 Main Chinese insurers have no strong desire to expand insurance to earthquake risk. In order to ensure adequate compensation ability, insurance companies must prepare a big number of reserve solvency ratio which will reduce the efficiency of the use of the premium. In the property insurance market of China, 3 main insurers PICC insurance, Pacific Insurance, Ping An Insurance take nearly 70% share, the market competition level is still relatively low.

3.3.2.5 There are traditional habits in the public sense that the government will rescue all. Over the years in disasters, the government gave strong financial relief compensation, as well as social contribution, which was reducing the people to use the insurance method to prevent the loss from disasters, and reducing the demand on insurance to the earthquake.

3.3.2.6 Capital market shartage. Insurance premium must ensure the safety, value-added and transferring risk. Even China had tried to use channels with savings bonds, stocks and other small amount of financial derivatives, but there are still no sufficient and skillful ways in international capital market to transferring risk and increasing value.

IV. Exploring solutions

Although facing difficulties and problems, China government, insurance/ reinsurance companies and academia have set out to explore solutions, to. seek a way to expand insurance to earthquake risk in a complex frame of government, insurance market, charitable aid, personal and enterprise, which is to seek assurance following the rule of wide coverage, small sum insured, prudential capability step by step and non-profit, focusing on basic protection. Finally, independent earthquake insurance shall be achieved.

4.1 Emphasizing actuarial research. To scientifically determine earthquake premium rates, actuarial research has been put in the most important position to analyze on specific areas, hazardous extent and relevant socio-economic level of the region.

According to a research group’s report of “the family property earthquake insurance", which is using the full probability method, should an earthquake occurs by 2010, the expected economic loss is RMB60.6 billion. By respectively suppose, 5%, 10% and 15% of which is to be regarded as total loss of insured property, the actual payments were to be paid RMB3.03 billion, RMB6.06 billion and RMB9.09 billion, and these values are the expectations of the earthquake insurance fund.

Fund should be designed into the compulsory insurance, but taking into account the step by step developing course, 10% rate shall be regarded as actual choice to draw the initial fund size of $ 60 billion. In 2007, insurance companies' home property insurance, actual insuring rate is about 1 ‰, RMB1.7 billion, roughly equal to catastrophe insurance rate. Assuming initial market insuring rate of family property earthquake insurance is set in 10%, RMB170 billion, and with a additional premium rate of 50% insurance rate about 10% of start-up period, the estimated premium volume of approximately RMB8.5 billion, which can be meet the expectations of the earthquake losses.

In the event of a very large earthquake loss, it needs government to reveal all the details. Specifically, it also need handling within capability, for example, when a loss of main structures (foundation, room and pillar, wall, spindle) accounts for more than 50%, or a loss of the total construction area more than 70%, the standard compensation shall be 100% of the sum insured； Accordingly, when it comes to the loss of main structure accounts for 20-50%, or 20-70% loss of construction area, 50% of the sum insured will be a limit standard.

【Japan have a sophisticated experience that the Japan Earthquake Reinsurance Company was founded by all property insurance companies to cover all earthquake reinsurance.

In principle, when the claims amount is under 75 billion yen, it is compensated by the insurance company； when amount between JPY 75 billion to JPY 810 billion, insurance companies and government take each half respectively； when the claims amount is from JPY 810 billion to JPY 4.1 trillion, 95% share will be compensated by the government, the other 5% for insurance companies. By the end of March 2007 (2006-2007 fiscal year), there were total 11 million contracts of earthquake insurance, and the relevant premium size was about JPY 139 billion, accounting for 1.6% of all property insurance premiums.】

As to China catastrophe earthquake in 2008, among the direct loss, residential houses accounted for 27.4% with approximate RMB231.19 billion. If 10% is covered by earthquake insurance, the loss will be RMB 23.12 billion, accordingly the government shall reveal all the details of 146.2 (actual loss RMB23.12 billion minus initial fund RMB8.5 billion). Considering of affordability, RMB23.12 billion could be set as the compensation limit, if an earthquake loss exceed the compensation limit, actual compensation shall be handled according to the ratio between the limit and the actual loss. The limit could be gradually increased along with social development.

4.2 Strengthening the prevention and mitigation education, promoting earthquake insurance and building awareness of risk management to avoid negligence .

4.3 To improve channels including reinsurance in domestic and international market to scatter the high risk. Reinsurance should be primarily to the international market for sharing, it will not only realize risk diversification, have chance to learn from good technology and management in risk management, so as to enhance the domestic insurance industry.

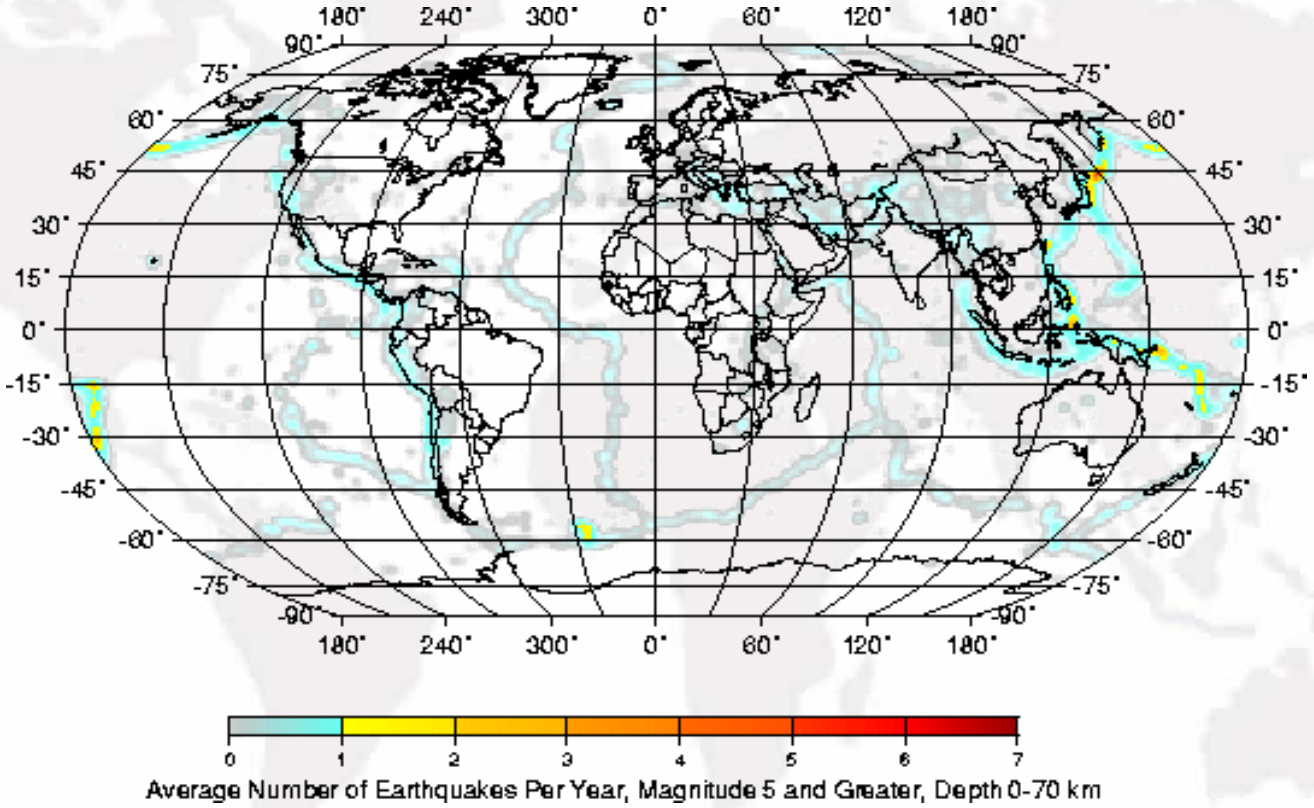
4.4 Prudent steps shall take in development. At the present, there is still no enough advantage to run individual earthquake insurance, but it is necessary to set out as an additional coverage. On the basis of previous experience, it is better to start by reducing the ratio to promote the enterprise/family property insurance for additional earthquake insurance. Meanwhile, central insurance fund should be set up for earthquake disaster, managing to realize a stable operation. 【Up to now, a insurance company in China is only required by provision on general fund, and no requirement on catastrophe fund】

4.5 To establish a well competing market, enlarging investment channels. A good market order will give great support to raise the level of premium income. In addition, the developed countries in the 1990s had begun to use of securitization technology to resolve the catastrophic risk in the capital markets, and have achieved good results. It is expected to try more on catastrophe futures, catastrophe securities, catastrophe bonds, emergency reserve bonds to confront catastrophe risk.

4.6 The Government supportsAnyway, every government is indeed “final catastrophe insurer”. The Government may consider legislation to promote insurance on earthquake by establishing a financial fund to ensure that compensation, and to reduce earthquake insurance premium tax, encouraging development.

4.7 Enhancing technology research on prevention and mitigationInsurance industry shall strengthen technical cooperation with administrative department such as the State Earthquake Bureau, the Central Meteorological Bureau, to integrate their resources and data in statistical analysis, to scientifically develop independent insurance coverage, meanwhile, to monitor the insured improving anti-earthquake technology. Expanding insurance on earthquake is not only to improve the compensation level, but also to improve the ability to prevent and mitigate the loss. Enlarging international communications, it is to learn from sophisticated international experiences, to enhancing the research on disaster prevention, such as technology of anti-earthquake construction, prevention drills and training for citizens, to reduce the life/injury and property loss, to establish a well running insurance system.

Conclusion



Earthquake Density Maps for the World（from USGS）

In the background of globalization and rapid development, the world is facing higher loss risk of catastrophe earthquake. Following the promulgation of the Earthquake Disaster Mitigation Act, the China has decided in 2009 that the May 12th of each year is the National Prevention and Mitigation Day, to create favorable circumstances to promote relevant works including development of insurance on earthquake.

Here I would like to express my sincere thanks again to the conference organizing committee and DPRK government for providing this very privileged opportunity for international insurance industry. I believe that through this and constant communications, more and more, better ways for prevention and mitigation will be spread, I also believe that every country and her people will be more and more capable to overcome catastrophe and embrace a better tomorrow. Kam Sa Hamni Da! Thank you!

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Russia – The Opportunities Of Emerging Reinsurance Market

The history of modern Russian reinsurance industry started in 1990. We can consider Russian reinsurance market to become relatively independent since 1992 when first national reinsurance companies appeared.

Currently, the Russian reinsurance market is represented by three groups of operators providing incoming reinsurance services. The first group is composed of the Russian composite insurance companies, also involved in reinsurance. The second group consists of Russian specialized reinsurance companies (licensed exclusively for reinsurance). And finally, foreign insurance and reinsurance companies can be referred to the third group.

Division of market sectors between these groups and their specialization can be described in general as follows:

Foreign reinsurers are involved in reinsurance of corporate property, construction and marine risks. Russian specialized reinsurers operate in reinsurance of motor, credit risks, cargo, etc. And composite insurance companies do not occupy any particular market niche and do not have any specialization. On the one hand, their source of reinsurance operations development has been continuously based on the reciprocity of risk exchange with other insurers; on the other hand, some of composite players have built up sufficient capacities to reinsure significant lines of business.

It's fair to say that Russia has developed a sound reinsurance market, where one can find companies of different value and specialization. This is confirmed by the percentage for premiums transferred from Russia to foreign reinsurers: the results of the first half of 2011 show 57% of reinsurance premiums have been transferred abroad, and 43% have been left to the domestic reinsurers. At the moment there are over 200 insurance companies operating in Russia, and over 50 of them accept risks from abroad.

Now, I would like to come to the main factors promoting the further development of the Russian reinsurance market and its integration into the global market.

1. On the 1st of January 2012 the minimum requirement for the share capital for the companies licensed to operate in reinsurance was increased from USD 4.07 Mio to USD 16.3 Mio. It will lead to increase of reinsurance capacities, improve reliability of the reinsurance market and force occasional (weak) players out of the market.

2. Western reinsurance companies reconsider the terms of obligatory reinsurance treaties concluded with Russian insurers. Top international reinsurers have turned to pay more attention to terms and limits of indirect sections. As a result, some specific risks previously reinsured abroad within extensive obligatory treaties, can go back to the Russian reinsurance market.

3. The introduction of new compulsory types of insurance. Prompt development of the Russian insurance market.

The introduction of compulsory liability insurance for hazardous industrial facilities (HIV) can greatly contribute to the Russian reinsurance market growth, as under this law the relative national reinsurance pool will be formed. Since the law on compulsory HIV liability insurance was introduced at the 1st of January, 2012, over 138,000 of compulsory insurance contracts have been already signed with the overall written premium exceeding RUB 5.6 billion (USD 200 Mio).

The Russian reinsurance market directly depends on the general stability and growth rate of the domestic insurance market. The reinsurance industry was surprisingly easy to overcome difficulties of the recent years. Many companies have come out of the financial crisis with relatively high figures. Russian insurance market has been recently showing clear positive trend. It is steadily growing at some 15-17% per year and gradually approaches to the international operational standards.

The Russian market has successfully overcome the test for large losses. For example, Russian reinsurance market has covered more than half of USD 31 Mio loss due to 2006 accident at Azovstal Metallurgical Works in Ukraine. A substantial part of USD 75 Mio loss caused by fire at the warehouse of Protek Company - the largest drug distributor in the country, was also paid up by Russian reinsurers.

Concordia Industrial Complex in Kaliningrad region suffered a huge fire on June 11, 2010. Total sum insured under the policy of VSK Insurance exceeded USD 100 Mio.

The main part of the risk was placed under obligatory treaties with the leaders of Russian and international markets. As a result Concordia received from the insurer reimbursement in the amount of USD 70 Mio. That's why we can say that Russian companies are able to provide reliable reinsurance cover for larger risks.

Rating of financial stability is an important indicator of the company's financial standing. With the assistance of the international rating agencies such as Standard & Poor's, Fitch Ratings, A.M.Best and Moody's Russian reinsurance market has made a good step forward in this direction.

Today nearly two dozen insurance and reinsurance companies in Russia including almost all national market leaders are rated by international agencies. Let me remind you that Russia's sovereign rating is BBB by S&P scale. Besides, there are a number of reinsurance operators in Russia who being one of the industry leaders, have no international ratings.

Those companies, e.g. Rosgosstrakh, VSK Insurance and some others are in no doubt strong players in the reinsurance market. However, thanks to their specialization in servicing domestic clientele they have never applied for the international rating. Nevertheless this in no way prevents them from actively accepting risks in reinsurance from abroad.

Today Russian reinsurance market does not claim to be a worldwide leader. However, along with the leading markets we always need the markets supporting. And as a supporting capacity, we are working quite successfully.

Comparing Western reinsurance markets to the Russian one we can identify a number of differences. Generally speaking it is possible to place a major risk in the Russian market at lower cost and deductibles. According to Western reinsurers, the difference between Russian facultative reinsurance and Western one lies mainly in the cost of reinsurance protection for certain risks. Due to some internal and external factors Russian reinsurance industry enjoys lower production costs leading to rather attractive pricing for reinsurance products. This does not mean that our reinsurance is cheap, but if compared to the international market, does not seem that expensive.

Russian reinsurers have learned to operate in accordance with Western standards, have made transparent their financial performance. At the same time the cost of reinsurance in the Russian market is lower (And this cost is

inevitably included into the basic rate for the original insured). With this in view, it appears rather dubious whether to consider the risk reinsured in the international market (at higher price and with no guaranteed reliability) to be really advantageous for the client.

Another important advantage of our market is our highly educated and professional staff grown up in Russian reinsurance companies. In addition to the traditionally good basic education many Russian underwriters, lawyers, financial officers have passed training abroad, have got academic degrees. To operate in the international market it is vitally important to speak foreign languages fluently. The majority of Russian underwriters engaged in foreign reinsurance speak English or other international languages. In any case brokers are ready to assist in this issue.

Today foreign business is an important trend supporting positive development of the national reinsurance market. Foreign risks share has been steadily growing for the last six years and reached almost one third of the overall reinsurance premiums written by Russian operators in 2011 - 29%.

In view of the growing demand for alternative capacities in the world market the share of risks coming to Russian reinsurers from abroad (mostly from the Middle East and South-East Asia) is getting larger and larger.

In conclusion I would like to mention the unique feature of the Russian reinsurance market. From the very beginning of the 90s of the last century our reinsurance market has been completely open to the foreign players, and all the time Russian companies have been directly competing with the leaders of the international reinsurance industry. And not they only did survive, but just in 20 years have covered the way that Western reinsurers have passed for centuries. And now Russian reinsurers are catching up the leaders.

“GLINSO - Insurance brokers” LLC., Moscow, Russia, 2012

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Arbitration Clauses in International Arbitration Contracts

1. Almost all Insurers and reinsurers when entering into reinsurance agreements hope that that even if the contract proves to be unprofitable there will be no disputes that cannot be sorted out without recourse to lawyers. However in reality disputes do occur. How these disputes are dealt with and resolved depends to a large extent on the terms of the reinsurance contract itself.

2. Almost all Reinsurance contracts contain an arbitration clause which, unless both Insurer and Reinsurer agree to waive its operation, means that the dispute will be dealt with under the arbitration provisions set out in the agreement.

3. Even if there is no arbitration clause in the contract, it remains open to the parties to agree to refer a dispute to arbitration after it has arisen.

4. Today I am going to consider various issues that arise out of arbitration clauses and give my view on the matters Insurers and Reinsurers should consider in relation to them.

5. The first issue I believe should be considered is whether an arbitration clause is desirable at all. There are various advantages in agreeing to arbitrate any dispute but there are also a number of down sides.

6. The advantages of arbitration are well known. They include:

    a. **Confidentiality**

    Under English law and indeed many other jurisdictions arbitration disputes are confidential, they are not published and the parties are not permitted to reveal details of the outcome other than in limited circumstances.

Accordingly, the parties to the dispute do not have to "wash their dirty clothing" in public.

b. **Choice of tribunal**

In some jurisdictions the Courts are unfamiliar with reinsurance law and practice. Arbitration agreements allow the parties to agree on the number, class and qualifications of those that will determine the dispute. Often it is specified that the arbitrators must be or have been officers or senior employees of an Insurance or Reinsurance Company. It this way parties know that those hearing the dispute will have a practical understanding of the issues in dispute.

My own preference is to have a tribunal of three, two of whom are market practitioners and one of whom is a lawyer experienced in reinsurance law. This combination normally ensures that disputes are dealt with both knowledgeably and that the legal formalities are properly complied with.

c. **Seat of Arbitration**

The parties are free to agree where the arbitration will take place and under what procedural laws and rules. Accordingly a neutral venue for the arbitration can be agreed by the parties. It will be of no surprise to you that I consider England to be an ideal venue as it has both a developed law on arbitration procedure and an abundance of expertise in dealing with reinsurance disputes. There are, of course, other jurisdictions which are excellent. For example, Singapore with its International Arbitration Centre is, in my experience, a centre of excellence which has a good set of arbitration rules and procedures.

d. **The law governing the contract of Reinsurance**

The Parties are also free to agree the law of the Contract. This does not have to be the same law as the seat of the arbitration. Thus an Arbitration taking place in England where the procedural law is English can be decided on the substantive law agreed by the parties. I recently sat as an arbitrator in a large Insurance dispute heard in Singapore under the SIIC Rules (which are subject to the law of Singapore) where the substantive dispute was heard applying the law of Indonesia which was the law specified in the Contract of Insurance.

e. **Enforcement**

Most Jurisdictions will readily enforce an arbitration award. A large majority of countries have subscribed to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards which, subject to certain safeguards, enables a party to enforce an international arbitration award in

those countries who have subscribed to the convention. Many of those countries who have not subscribed to the Convention will, under their domestic law, allow the enforcement of International Arbitral awards in any event.

6. There are, however, disadvantages in agreeing to any dispute going to Arbitration these include:

a. **Cost**

Although the position varies from jurisdiction to jurisdiction, Arbitrations can prove to be an expensive way of resolving a dispute and can be substantially more expensive than resolving the dispute in Court. This is certainly so in England where despite substantial increases in recent years in Court Fees these tend to be far less than the cost of employing three arbitrators and having to hire a suitable venue for the hearing of the dispute. In addition, under some of the arbitration schemes (such as the Singapore International Arbitration Centre) the administrators themselves charge fees which, in a dispute over large sums of money, can be substantial.

Having said this, it will be possible in some arbitrations for the parties simply to make written submissions and to agree to dispense with costly oral evidence and submissions. This may give rise to a cost saving that is generally not available in Court proceedings.

b. **Confidentiality**

Although Confidentiality is often considered an advantage this is not always so in practice. Often a Reinsurer or Reinsured is face with a series of disputes which are closely linked but involve differing insurers or reinsurers. In these cases in many jurisdictions (including England) the Party who has successfully fought the first dispute is not entitled to rely on the successful outcome in order to progress or influence the remaining disputes. Judgments given by Court are almost always public and can be relied upon in subsequent disputes.

c. Third Parties

One of the great disadvantages of an arbitration agreement is that only those who have entered into the agreement can be forced to be a party to any subsequent dispute. In practice, particularly in Insurance and Reinsurance disputes, this can cause practical problems. In the vast majority of Reinsurance disputes I have dealt with over the last forty years when a dispute breaks out between Insurer and Reinsurer issues arise as to the involvement and culpability of the Broker who placed the Reinsurance contract.

Where there is no arbitration agreement this does not (certainly in England) create too much of a problem as the broker can often be joined as an additional Defendant in the proceedings so that all issues can be decided at the same time. This is much more problematical where there is an arbitration clause. In practice the Insurer and Reinsurer have to first fight out the dispute amongst themselves and, in the event that the Tribunal finds against the Reinsured, a fresh action has to be brought against the broker if he appears to be responsible. This involves a substantial duplication of costs particularly as in the subsequent action it is open to the Broker to dispute the findings of the Tribunal.

d. **Speed**

A poorly drafted arbitration clause can result in very substantial delay particularly with regard to the appointment of the Tribunal. Certainly in England it is quicker to get proceedings underway in Court (although the recent advent of pre-action procedures has eroded this advantage to some extent).

Equally, the Courts – certainly in England – have a ready-made procedure for granting summary judgment in cases where it is clear that there is no proper defence to a claim. In these circumstances a claimant can to go to Court at an early stage in the proceedings and ask a Judge to make a finding that the defendant has no real prospect of success and to give judgment in favour of the claimant. This removes the need to go through the usual litigation process and an expensive, full-blown trial. This can speed up the time required to get a judgment considerably (albeit it will only be available in a relatively small number of cases where the issues are clear-cut).

e. Multiple disputes

Sometimes similar disputes arise both on the facts and the law which need to be determined in respect of different individual contracts. Where each of the contracts contain arbitration clauses it is often necessary to initiate separate arbitrations. In particular, where the Reinsurers differ from contract to contract this can lead to huge complications. Different arbitrators may be appointed and may come to differing conclusions. In many jurisdictions this can be avoided in that the Court can order that all the similar disputes be heard at the same time by the same Judge thus saving cost and avoiding contrary findings.

7. Other considerations

If it is decided that the inclusion of an arbitration clause is desirable it is important to consider the precise terms. In my experience little attention is often paid to the

wording of the arbitration clause itself. However many of the potential disadvantages can be mitigated by the wording.

In particular it is important to consider both the law to be applied to by the Tribunal and the seat of the arbitration. Decision has to be made as to the number and qualifications of the Tribunal and very importantly the procedure and timing of the selection and appointment of the Tribunal. I have seen clauses whereby the appointment of the Tribunal can take over six months to complete.

8. Conclusions

Although both Insurers and their Reinsurers always hope that no disputes will arise in the event of a claim it is in my opinion sensible for both sides to consider what should happen in the unfortunate event that something goes wrong. This consideration should include whether or not an arbitration clause is desirable and, if so its terms. It is important to appreciate that there is no ideal arbitration wording that fits all situations. The proposed wording needs to be carefully considered on a contract by contract basis to ensure that its terms are acceptable to both parties.

If you have any comments or queries regarding the issues I have raised my Partner Tim Brentnall and I will be happy to receive them.

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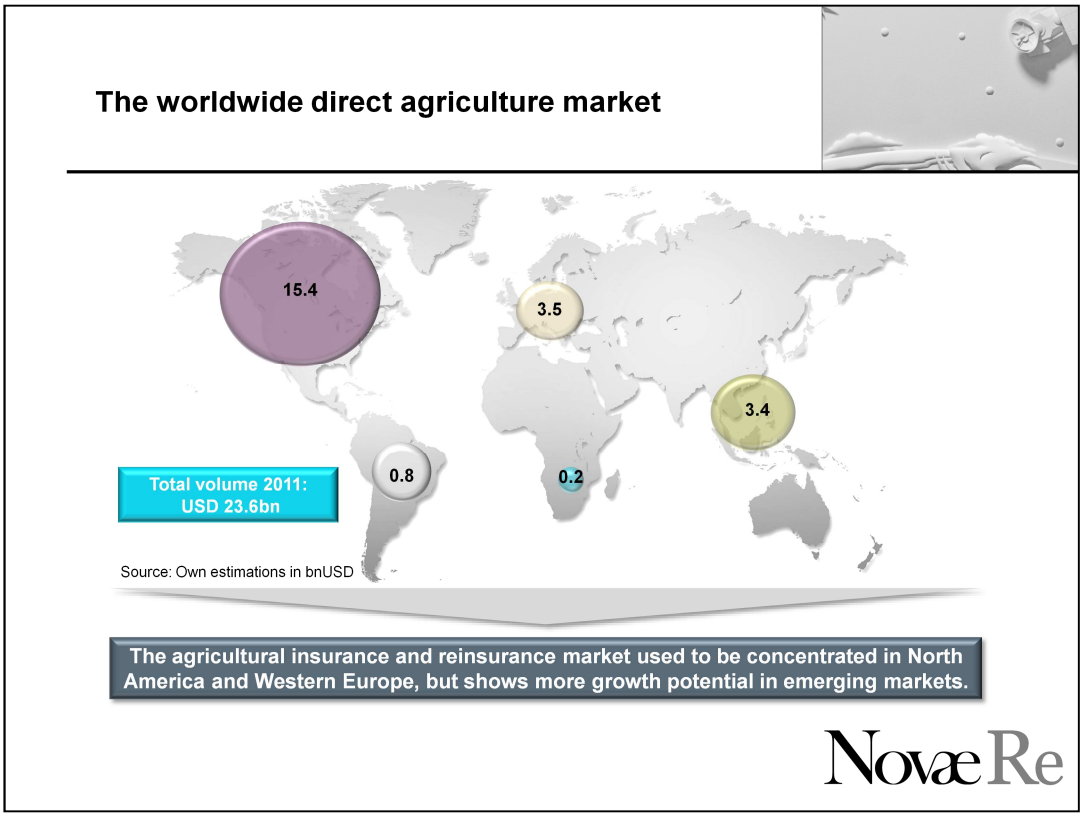
Ladies and Gentlemen,

First let me say thank you to the organizer of this conference , FAIR association and Korean National Insurance Company.

It is a honor for me to speak in front of this audience.

My name is Karl Schneider and I am since almost 30 years involved in Agriculture insurance and mainly reinsurance. I am working for Novae Re in Zürich and our risk carrier is Syndicate 2007 of Lloyds of London. For our company agriculture is the largest line of business.

In the next 10 minutes I want to make a short introduction to the agricultural insurance and reinsurance market.



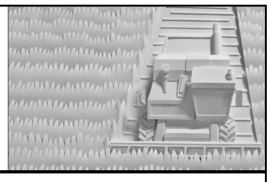
The world agriculture direct premium income amounts in 2011 to US Dollar 23.6 billion.

Historically North America with its government subsidized schemes have been the largest market followed by the traditional European single peril hail markets.

Only since 2004 a material growth takes place in Asia. For example China had in 2004 approximately US Dollar 60 million in agricultural premium. With the start of the government support the market growth to nearly US Dollar 3 billion. We expect that Asia with China and India will soon exceed the North American direct market.

What are the lines/types of agricultural business?

Main characteristics of agricultural insurance



LOB	Main Perils	Rate	Deductible
Crop Hail	Hail	1 – 15%	30%
MPCI	Drought, Flood & Hail	10 – 20%	10 – 50%
Livestock	Disease, (epidemics), accident, & theft	3 – 10%	30%
Bloodstock	Accident & Disease	1.5 – 8%	10%
Forestry	Windstorm, Fire, & Lightening	0.2 – 2%	0.5 – 1%
Aquaculture	Pollution, disease, algae blooms, & storm	2 – 8%	15 – 30%
Greenhouse	Storm, flood, fire, wind, hail, & lightning	1 – 2%	10%

Agricultural insurers usually do not insure the agricultural asset, but it's output.

Novae Re

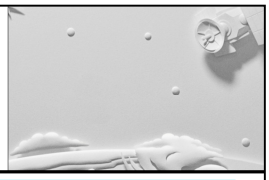
This slide shows the important lines of agriculture covers. You can see the major perils covered , the range of rates and deductibles. Please note these are just hints to get the feeling. In agriculture we are talking of percent rates and not permil.

Except greenhouse insurance the agricultural lines of business are covering the output and not the assets.

Also there is normally no casualty cover included.

The next slide will show the importance of the individual line and world wide contribution.

Lines of business, by geographical region



Distribution of 2011 insurance premium per lob and region in mUSD

	North A	ASIA	EUROPE	South A	AFRICA	Central A	OCEANIA	Total
MPCI	13,283	2,960	1,856	287	89	254	106	18,835
Crop Hail	1,206	-	903	276	15	-	15	2,415
Forestry	-	63	9	22	5	-	25	124
Aquaculture	-	-	105	14	-	-	5	124
Livestock	711	430	205	6	-	5	0	1,357
Greenhouses	-	3	97	-	-	-	-	100
Bloodstock	201	-	406	-	-	-	-	607
Grand Total	**15,401**	**3,456**	**3,581**	**605**	**109**	**259**	**151**	**23,651**

Source: Own estimations

MPCI and Crop Hail programs are the most wide spread programs, but one should not underestimate the potential of the livestock market

Novae Re

MPCI (Multi Peril Crop Insurance) is by far the most important line of business with a premium income of US Dollar 19 billion. MPCI covers started only to a bigger extent in the 80th.

The success is based on the wide range of perils covered and therefore the good protection for the farmer. Nowadays revenue covers, which insuring the price risk too, have a large share in North America.

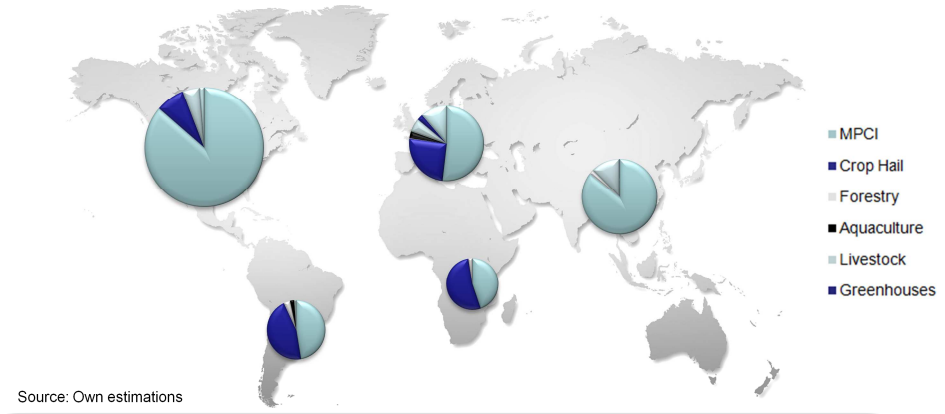
Almost all schemes world wide entertaining government support in form of premium subsidies and catastrophic reinsurance covers.

Crop Hail is beside of livestock the oldest line of business and started in Europe and North America in 1750. It is still an important line as it is covering spot losses and has lower deductibles than MPCI covers which often insuring just input costs.

Livestock insurance is larger as shown above, as many governments worldwide are providing farmers with an indemnity if the government is slaughter animal as a measure to eradicate the spread of epidemics, these is normally done without a premium charge to the farmer.

In some European countries private or cooperative insurer providing indemnities in addition to the government it is sometimes an increased sum insured or covers the business interruption.

Agricultural policy influences the distribution per line of business



Source: Own estimations

When ever the government decides to subsidize agricultural insurance schemes MPCI is the coverage of choice.

Novae Re

This slide shows graphically what we have seen before. In countries where the governments are subsidizing crop insurance comprehensive Multi Peril Crop Insurance prevails.

In North America it is US and Canada.

In Latin America it is only Brazil and therefore there is still a lot of unsubsidized hail business mainly in Argentine.

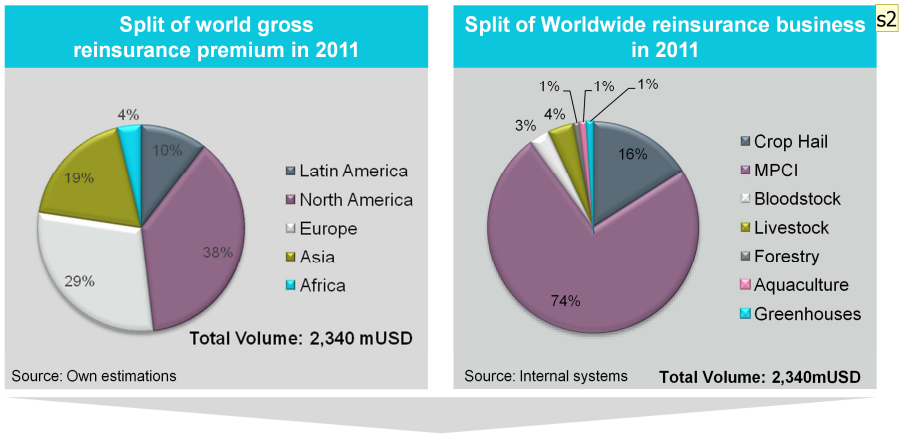
In Europe MPCI is subsidized in Spain, Portugal and Italy. France has started recently. Germany does not have any subsidies for crop insurance and therefore hail is there dominant.

South Africa has no subsidies at all, but due to the fragile climate MPCI has an almost 50% share.

In Asia there is almost only MPCI due to heavy subsidies and most crop insurance developed only in the last decade.

In Australia and New Zealand only hail is available.

Geographical and line of business split of the reinsurance market by premium



s2

The North American MPCI schemes account for more than a third of global reinsurance premium.

Novae Re

Let us change to the reinsurance market.

Out of the 23.5 billion direct premium approximately 2.4 billion are going to the reinsurer worldwide, which is 10% by premium. Nevertheless the ceded liability is higher. Which a later slide will show.

Geographically North America buy by premium the most reinsurance. Especially smaller low capitalized mono line companies need proportional reinsurance. Larger and multiline companies buy mostly non proportional cover. In crop insurance Stop Loss (annual aggregate excess of loss) are most common. In agriculture insurance, except for livestock epidemic covers, a high frequency of events leads to severe losses and not like in property cat losses out of one event.

In Europe in almost all countries non proportional covers are bought. This could change in future if new capital requirement are coming for insurer.

Asia started reinsurance buying on a mixture of proportional and non-proportional covers.

Latin America is mainly proportional reinsurance.

Looking at the distribution of the reinsurance premium by line of business it is obvious that the more risky and volatile multi peril crop insurance buy the most reinsurance compared to other lines.

Slide 6

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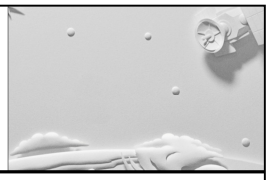
Liability ceded to the reinsurance market



2011 agricultural downside reinsured by private reinsurance companies after governmental reinsurance per type of coverage.

Continent	Downside [m USD]	Non pro reinsurance	Prop reinsurance	Total
NORTH AMERICA	12,318	59%	9%	67%
EUROPE	3,528	65%	11%	76%
ASIA	4,146	55%	25%	81%
SOUTH AMERICA	363	13%	76%	89%
CENTRAL AMERICA	311	45%	52%	98%
AFRICA	239	42%	47%	89%
OCEANIA	121	45%	48%	94%
TOTAL	**21,026**	**39%**	**14%**	**76%**

Source: Own estimations

Reinsuring nearly 80% of the overall downside private reinsurance companies play a crucial role in agricultural insurance.

Novae Re

Before we looked at the split by premium and this slide shows the split by liability.

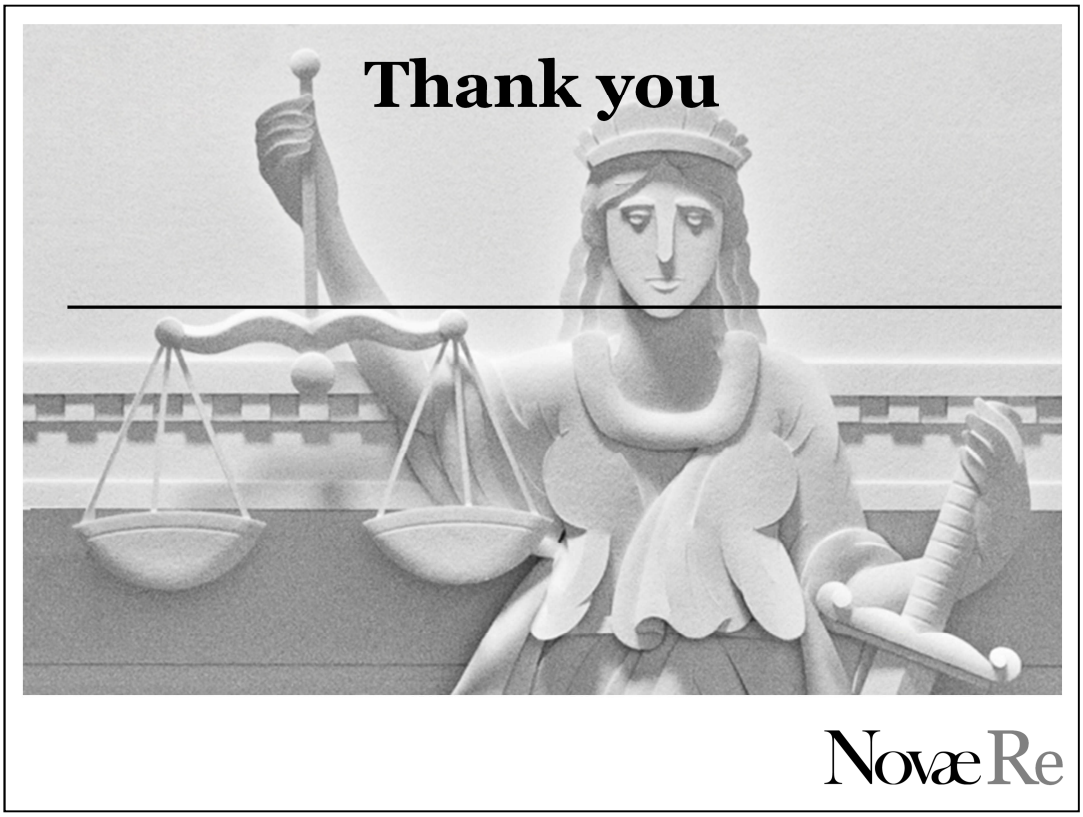
Basis of the above figures are a database made by our team where we tried to capture all agriculture business by direct premium, company and there respective reinsurance buying.

For the direct and proportional reinsurance business we used the 250 year event as maximum liability and for non proportional reinsurance we added the liabilities together.

Downside is the maximum loss after deduction of the direct premium, e.g. a company has a direct premium of 10m and a modeled 250 year is 25m than the downside is 25m minus 10m equals 15m.

On basis of these assumptions almost 80% of all liabilities are ceded to the international reinsurance community. The direct market cedes for this risk transfer “only” 10% of its premium to the reinsurer.

With 80% liability ceded, reinsurance is very crucial for the agriculture insurance world wide.



Thank you very much for your attention. If the time permits I pleased to answer any question.

I firstly thank the Organising Committee for their invitation to address this Seminar and also take this opportunity to thank our hosts for their hospitality.

I've been asked to speak on the general principles relating to the conduct of loss surveys and claim adjustments following catastrophic events, from a crop insurance perspective. My approach to the topic will focus on the fundamental nature of claims handling, the need for proper documentation of the claims process, and will consider the usual loss survey and adjustment functions. I'll then refocus on some of the peculiarities that can arise in terms of catastrophic events, or CAT events, as most here would describe them.

While it's often said that one person's disaster is another's catastrophe, that will hardly suffice as an appropriate definition for our purposes. In Insurance, a Catastrophic Event is generally held to be a low probability, high cost event, involving a large number of individual claims, even though I suspect that most Crop Underwriters would probably call those working losses.

Agricultural production is of course subject to many uncertainties. Adverse weather, insect infestations and plant diseases can severely reduce the yield or quality of a crop, effectively wiping out a farmer's entire profits for the whole year in a bad season, from a single event.

Many causes of loss to which farmers are exposed, such as heat and drought, freezing temperatures and excessive moisture, can also affect whole regions as well as multiple crop types. Indeed, droughts may also persist for extended periods so that farmers may suffer successive losses.

From an insurance perspective, an important consideration when looking at the development of an insurance product to meet these exposures is the potential for catastrophic losses resulting in an extraordinary number of claims over a widespread area.

However, unlike many other forms of Insurance in which single losses are the norm, Crop Insurance actually tends to be treated as a CAT product, because it's more usual for a huge number of claims to be generated from a single event. That's not to say that every loss event will necessarily be of catastrophic proportions, but this class of business certainly tends to generate high claim numbers. This of course presents unique challenges for those involved in Crop Insurance because they need to be in a constant state of readiness to respond to potentially large scale events.

Against that backdrop, it therefore stands to reason that the success or otherwise of claims handling in Crop Insurance will be totally dependent on the quality of pre season, or at least pre event, preparation. After all, there is no point trying to develop an action plan after the event.

Instead, the response mechanism of a Crop Insurance program must be thorough, instantly actionable and well managed if it is to have any chance of delivering a seamless claims procedure. After all, regardless of the class of business, there is no doubt that poor claims handling can produce an absolute catastrophe out of any claim.

Claims handling in the generic sense is often said to be the “Moment of Truth” for the Insurance Industry, just as it can be for the Insurer and indeed the very product under which the Claim is made. Expectations on both sides of the divide are usually high.

Insurers usually want the claims process to run efficiently and effectively, and at minimal cost, while the Insured want to be quickly and fully compensated for their loss.

For many organisations, the claims process is merely seen as a one dimensional function of the Policy. Once paid, the claim simply becomes part of the program’s history. However, more enlightened companies see the claim as a report card on their operational effectiveness and will seek to extract and leverage every possible benefit from the experience, whether good or bad, from both an operational, administrative or analytical perspective.

I have always been an advocate of the early development and implementation of detailed claims procedure manuals for crop insurance programs. When I say early, I mean that they should be developed as part of a program’s initial development phase and then form part of the program documentation used to obtain initial capacity support and for subsequent renewals.

Most organisations have various policies and procedures that guide or dictate how decisions will be made and how the work of the organisation will be done. Well written policies and procedures increase organisational accountability and transparency and are fundamental to quality assurance and quality improvement programs.

Even when policies and procedures are not documented in the traditional sense, they still exist in practice, guiding decisions and determining how the various functions of the organisation will be carried out.

The problem, however, with unwritten policies and procedures is that they are not subject to the usual organisational reviews and accountability processes and lack transparency. In the absence of written policies and procedures, unacceptably different approaches can evolve, making the organisation's response both inconsistent and inefficient.

In terms of claims procedure manuals, they should clearly address all the component parts of the proposed claims handling process, linking, for instance, the description of the defined events contained in the Policy with the required validation criteria, or, the basis of settlement provisions with the loss adjustment procedures. They should cover every element of the organisational chain naming the key people responsible for service delivery and should document the various steps associated with the procedures in sufficient detail, to clearly demonstrate how the claims process will be handled.

The starting point for a claims procedures manual will be the actual Policy of Insurance, because after all, the claims process only exists to meet the obligations of the Policy. The manual should address the implications of each section of the Policy, and should equally clearly, highlight any important interpretation issues.

In developing the claims procedure, it's essential that the Policy is tested in a claims sense to ensure that the cover will respond as intended. There have been cases in the past where wordings have produced unintended consequences due to the language of the contracts, and I certainly recommend that the wording of triggers particularly, be tested by those entrusted with claims responsibilities well in advance of their implementation.

While the words chosen to define an insured event must mean what they say, for an event to be insurable, it must also be measurable, and unless the measurement process is capable of delivering the outcome required, and then be described and presented in a logical and objective manner, it will most surely fail when put to the ultimate test. It can also be helpful in the pricing phase to better understand the limitations of the assessment of losses, because the cost of the subjective elements of a procedure will all accrue to the bottom line of the program.

This early pairing of loss adjustment and pure insurance considerations in the design and development of new and existing crop insurance products simply ensures that the focus of both is harnessed at the earliest opportunity for the ultimate benefit of the program and both the internal and external participants.

There is of course a huge disparity between assessment methods used for various crop insurance programs. Mono peril or named peril covers, require a substantially different assessment approach to multi peril schemes, just as Index type covers have a completely different claims approach to traditional insurance products.

The fact is that if damage due to any specific cause is excluded or simply uninsured, there will usually be a need to either verify that no loss or damage from the excluded or uninsured cause exists, or that any related loss has been isolated from the claimable loss. The real challenge is selecting the best and most appropriate assessment method for the cover type. That decision however, has to be made in consultation with Insurers and Reinsurers, because it will very much influence the amount of any claim they pay.

An assessment approach based on the physical inspection and individual testing of each and every claim by agronomists or qualified adjusters, should of course, produce the most accurate result, but it will do so at the highest probable cost.

In contrast to that approach, an assessment approach that relies on an active Index or an externally measured parametric trigger, will cost next to nothing to implement and operate, but will expose the program to the greatest basis risk.

A cost benefit analysis of cost versus accuracy will always be problematic because there is often no simple answer. In the absence of available expertise, and in both the numbers and regions required, there may be no option but to adopt a less invasive assessment solution. Either way, these decisions need to be made at the very beginning, so that product pricing and claims documentation can reflected and support the approach to be adopted.

I've made the point previously that claims documentation is an important part of the claims handling process, because not only does it provide the recipient of the benefit with a summary of how the claims, and thus their compensation, was assessed and calculated, it also provides an audit point for overall program results.

Obviously, the basis of measure will dictate the nature and extent of documentation required but generally speaking, all claims regardless of the type of scheme, have to be documented at some stage in the process.

For example, a mono peril claim will probably generate considerable documentation, ranging from field test and survey sheets through to assessment and claim calculation forms, whereas the documentation associated with an Index type product could probably be limited to a copy of the Index, as and when it is triggered.

The extent of documentation required in the claims process can also sometimes be dictated by consumer expectations or the legal and regulatory framework under which the program operates. In either case, it's obviously quite important that claims procedures and the claims related documentation generated, at least meet the prescribed standards.

Rather than delve too deeply into the specifics of the survey process, I'll just make a brief comment on an area that I rate as being quite important in the overall landscape of the crop claim. Even in the most consumer driven crop programs, where detailed physical surveys are required at each and every loss location for the purpose of testing and assessment, I would like to see the Insured take a greater role in their own assessment of the loss.

For the programs we deal with, we always insist that the Insured thoroughly inspect their own crops before our attendance, and provide us with a property map on which the various areas of damage have been shaded. We make the point that it's not our function to find the damage, merely test it. Taking that one step further, we always insist that the Insured accompany us during the course of the testing and assessment process, and after explaining and demonstrating the testing procedure, we will always offer the Insured the opportunity to conduct a test or preferably a number of tests themselves.

While this serves to make the entire loss quantification process more transparent, my view is that once properly instructed, there is no reason why an Insured couldn't assess and test their entire crop, presenting us with their assessment for validation. Strategic spot checking will quickly reveal whether the Insured's assessment is accurate and where it's found to meet acceptable criteria, no further inspection would be required. If however, it failed the spot checking guidelines, a normal assessment would be carried out.

This approach is currently used to some extent on broadacre claims, which in our market, usually have a 5% or 10% excess. Our procedures require that the most severely damaged areas be checked first, because if the damage in the worst areas doesn't exceed the excess, there's no point testing other affected blocks. Of course, if the Insured haven't checked their crops before we attend, we could waste a day checking a 2,000ha crop only to find no claimable damage.

Encouraging the Insured therefore to participate in a form of self assessment, would certainly reduce the cost of the assessment function, and could well be an important strategic initiative when dealing with a Catastrophe event.

Turning now to issues peculiar to Catastrophe events, I said earlier that large claim numbers being generated by single events is not necessarily unusual in Crop Insurance. That said, the difference between the usual experience and one which would properly qualify for the title of Catastrophe, would simply be a question of size and severity.

At the end of the day, Catastrophe events will certainly test even the best prepared crop insurance programs. Quite apart from the significant monetary losses likely to arise, which can place a strain on the best placed slip, the sudden influx of a huge number of serious claims places stress on the front and back office functions as well as those charged with the responsibility for dealing with the clams at the coal face.

The claims space following a catastrophic event for crop insurance can certainly be somewhat different to the usual environment. To begin with, we can't always rely on the phone and fax for communications, because when floods or hurricanes occur, entire regions can be left without basic services. This means that not only are the Insured farmers often unable to provide timely notification of their loss, even if they could somehow reach someone somewhere to lodge the claim, we wouldn't be able to contact them.

It also not unusual for there to be no accommodation facilities available for the survey and assessment crews, quite apart from a lack of fuel for the vehicles and other related facilities. If access is possible, all parties entering the region will be required to be totally self sufficient in terms of food, water and any other resource required.

These challenges are not really that different from those which face property adjusters when they respond to natural disasters, but in the rural areas, there are often few facilities available even before a disaster occurs.

In these times of crisis, one simply needs to think outside the square, and take whatever actions are necessary to achieve the desired outcome. In terms of communications, we have often resorted to the use of public radio as a means of keeping farmer's informed of the efforts being taken to deal with their claims. In widespread events, Insurers are usually able to identify which policies will have claims and radio broadcasts can then become more regionally relevant so that affected farmers can take some comfort from the fact that their Insurers are aware of their plight.

In situations where road access has been made impossible, we have in the past resorted to the use of aircraft to obtain a better appreciation of the extent of losses, using local guides to assist in the identification of properties. In situations where damage over a large area has been extensive, particularly in respect of plantation type risks such as banana crops, some Insurers have been prepared to declare a constructive total loss on the basis of aerial photography alone.

Remote sensing can also be of significant benefit, if not for use in the loss assessment and quantification process, then certainly in terms of assisting in the process of validating causation in the case of flooding, drought and freeze injury.

The response to catastrophic events will of course be different in almost every circumstance, given the variables of location, crop type, peril and product. Rather than necessarily create procedures specifically for the purpose of dealing with catastrophic events, I believe that the basic claims handling process underpinning all crop insurance programs should be designed to be sufficiently flexible and effective in all environments.

In conclusion, can I simply say that regardless of the task, there is no substitute for good preparation.

Contingent Business Interruption Following Catastrophe

Robert Dalton LLB, FCILA, FUEDI ELAE, FRSA

Slide 1

Ladies and gentlemen I believe that there can be no doubt that the insurance acronym of 2011 and to a very large extent 2012 is “CBI” standing of course for Contingent Business Interruption.

The recent spate of catastrophes from 2010 onwards has focused the attention of the world’s insurers on this aspect of claims adjusting and as we will see the sheer scale of loss and damage has challenged our industry to a greater extent than ever before. I think it is true to say that questions have been posed to which there are certainly no obvious or convenient answers and, just possibly, no answers at all.

What is certainly true is that recent events have caused policyholders, brokers and underwriters to look at what coverage was purchased and placed and what all concerned thought they had protected themselves against. Again we will see that the understanding of the insurance protection in place did not mirror the reality of the situation that both policyholders and insurers faced when the extent of the losses became apparent. Not only was coverage difficult to unravel and interpret but it was also found to have limitations in its application.

Slide 2

Of course Contingent Business Interruption coverage is not a new creation. It's been around for quite a while and has proved to be a very beneficial product on many occasions. As I'm sure you will know Contingent Business Interruption cover protects the policyholder against business interruption loss caused not at the insured's premises but at other third party premises. Such third party premises might be the factory of a component supplier, the premises of a customer or even premises, transmission lines and the like operated by utilities companies. The intention of the policy is clear; it is to protect the policyholder against business interruption loss flowing from damage at a remote location.

It is common for policies to specify such remote locations and incorporate sub-limits in respect of business interruption loss which flows from damage at a remote specified location. This is of course just another example or consequence of the commercial negotiations that take place at the time of proposal or renewal of a risk. The policyholder will wish to cast the coverage net as wide as possible whilst the insurer will be seeking to limit its risk for the premium to be paid.

So a typical CBI loss might be a fire at factory supplying the policyholder with a component essential for the policyholder to complete its own production and of course thereby achieve revenue and gross profit. As the component is unavailable the policy will operate to make good any business interruption loss and will also pay any increased costs of working that the policyholder might incur - for example, sourcing the component from an alternative but more expensive supplier.

The situation is straightforward then. The loss flows not from damage at the policyholder's premises but at third party premises and all we need do is to calculate the loss of gross profit and any increased costs! After all we've done it many times before!

Straightforward that is until the following event took place!!!

Slides 4 to 15

As can be seen from these dramatic and shocking images the Tōhoku earthquake and tsunami which took place on 11th March last year caused widespread devastation. It is probably impossible for any of us who did not witness it first-hand to understand the distress and fear that such an event causes.

Tragically at least 15,800 people lost their lives and the number of missing still stands at over 3,000 more than a year after the earthquake. There is little hope of finding these persons alive. On the island of Honshu almost 130,000 buildings totally collapsed, 255,000 partially collapsed and yet another 690,000 buildings were damaged. 340,000 people were displaced and around 4.4m households in north-eastern Japan were left without electricity and 1.5m without water.

On top of this the earthquake and tsunami caused extensive damage to the infrastructure of Honshu with roads, railways and airports all being damaged and disrupted. Logistics and supply chains were interrupted and power outages contributed to general disarray. Of very grave concern was the damage that three reactors at the Fukushima Daiichi Nuclear Power Plant suffered after their cooling systems failed following tsunami damage. As has been well publicised this resulted in residents within a 20km radius of the reactors being evacuated and the area embargoed. Whilst the situation has now stabilised no permanent solution to the problems at Fukushima has yet been found and the current thinking is that the area will remain radioactive and cocooned for decades to come.

As I am sure you will readily understand even a sophisticated and affluent country such as Japan was stressed almost to breaking point by this happening. Not only was there extensive damage to industrial, commercial and residential property but the whole of Japanese society was disrupted by the trauma that the event imparted.

I think I need say no more about the human cost of this tragedy. These images speak loudly enough.

Slides 16, 17 & 18

However, as if this event was not enough you will all I'm sure recall the extensive flooding in Thailand which features in these slides.

There were many policyholders with global businesses which not only suffered contingent business interruption loss from the Japanese earthquake and tsunami but then had further contingent business interruption loss due to the fact that suppliers in Thailand were crippled by these extensive floods.

So let us now pass on to how the policy coverage in place responded to the earthquake and of course focus on contingent business interruption loss.

Slide 19

As we have already seen here was extensive damage over a wide area with reports of the tsunami being up to 40m in height in some places. Even where the tsunami did not strike extensive and very serious damage was suffered through the effects of earthquake shock.

The real issue though was that Japan has a complex and integrated industrial and commercial base with major manufacturing industries such as motor and electronics. These rely upon advanced supply chains and it was quickly apparent that these were likely to be broken or at least badly disrupted by the event. Not only was this disruption the result of the earthquake shock and ensuing tsunami but there were also secondary effects such as electricity blackouts and logistical difficulties

where roads, railways and bridges had been destroyed. Not surprisingly the workers of many factories had also suffered personal bereavement and damage to their own homes and were rightly concentrating on this aspect of the trauma.

I have already alluded to the major problems at the Fukushima power plant. Apart from the difficulties this exclusion zone around the plant caused I am sure that if you cast your minds back to last year you will recall that there was widespread speculation in the media that leakages of radioactivity might endanger much of the population of Honshu. Again this helped to contribute to the general level of uncertainty surrounding much of industry and commerce.

Of course many of you will be thinking by now that anything connected with the nuclear exclusion zone or staged power blackouts or a bridge being destroyed cannot be a matter for insurers or any policy as these are in all probability excluded contingencies. This would be a perfectly correct conclusion of course.

If we return to our earlier simple example of the loss stemming from one supplier but instead of that supplier being affected by a fire their premises were damaged by a nuclear incident or some other clearly excluded contingency then we would be correct to conclude that the insured cannot make a claim on their policy for contingent business interruption as the loss flows from an excluded event. However, the complexity of the considerations here becomes proportionately greater, and of course far less clear cut, the longer the supply chains are and the more widespread the damage.

Slide 20

In this slide we are going to look at an overview of the coverage available in Japan.

Not surprisingly coverage for earthquake or earthquake shock is often severely limited or even excluded in Japan as it is in many earthquake prone countries. Indeed some insured's decide to not seek coverage at all as both premiums and deductibles can be significant. For example with the latter 5% of the site value (including the estimated maximum business interruption exposure) is not uncommon and for a factory complex this can of course be a very substantial sum running to many millions or even billions of Yen.

Whilst some policies exclude damage caused by earthquake shock they do cover damage caused by Fire Following Earthquake (and again as we have seen from the earlier slides this is a significant hazard when gas and electricity supply pipes and transmission lines are destroyed). The difficulty here though is an obvious one namely that of proximate cause.

Now, it is outside the scope of my talk today to debate this doctrine and its intricacies but suffice to say that I know of at least one significant case where it has proved to be a difficult and most important consideration. It required many weeks of debate before a decision was reached by insurers as to whether they believed their policy was engaged.

Reinsurers on such risks are also clearly going to have their own view about the proximate cause of a Fire Following Earthquake loss for obvious reasons. You can see that the debate may continue passionately down the "But for…" route. When, where and how does a Fire Following Earthquake originate and what are the relevant considerations in such circumstances? Many of you will know that there are some early twentieth century cases on this point but I would suggest that in today's more sophisticated environment we are more likely to find the answers to the questions we need to address in an investigation by Consulting Scientists who can of course study the exact mechanics of the ignition in great depth to bring about a clear understanding of the chain of causation.

Another consideration that the events of 11th March 2011 in Japan have brought to the forefront is the devastation wrought by tsunami.

Quite often coverage for “tsunami” is not linked to any coverage for the peril of earthquake but is separately covered or more likely is linked to “flood” coverage. The importance of this is that “flood” coverage in all probability has a fairly high policy sub-limit or no sub-limit at all. It may well be anticipated that policy renewals in Japan in 2012 will now impose such sub-limits (especially for contingent business interruption) given that tsunami damage had a catastrophic effect on many supply chains.

Slide 21

So now let us consider what practical coverage is available for contingent business interruption within the context of the Japanese earthquake (although as we can now see such considerations may be applicable or pertinent to any number of potential catastrophes).

It has become apparent to those dealing with significant contingent business interruption losses (and by this I mean insureds, brokers and adjusters) that remote or third party locations are sometimes specified but might not always be. Clearly a specified location is capable of study to determine the contingent business interruption risk it adds to the overall equation. A non-specified location is by definition not capable of survey so poses an unknown risk. This brings yet another element into the equation as we will see.

It is obvious that in a large corporate structure there may be many suppliers to the insured as well as many sub- suppliers, sub-sub-suppliers etc. etc. when we consider that the average family saloon car

has around 30,000 individual components it is not difficult to imagine just how many supplier locations may be involved.

So we need to consider how these can be treated and ranked within the policy coverage. It is important to bear in mind that cover is of course only likely to be available for certain perils and that some perils or contingencies will be expressly excluded.

Slide 22

This slide shows an extract from the Business Interruption section of a policy covering a multi-national company with many global risk locations.

As can be seen the method chosen to write the risk is to divide the suppliers into “Tiers” and then limit liability:

- Firstly, according to the degree of “dependency”
- Secondly, according to whether the supplier’s premises have been surveyed
- And, thirdly, according to whether the suppliers are named.

As can also be seen the limit of liability that insurers are prepared to give varies with the degree of underwriting knowledge which corresponds to the identification of the supplier and whether their premises have been visited and analysed. This should come as no surprise.

All in all a valiant attempt to deal with what was only ever going to be a complex risk in a logical and reasonable manner. The problem that was encountered was that the policy contained no clear definition (in fact no definition at all) of what a “Tier” was.

The insured are in a dynamic industry where suppliers change every year so whilst underwriting information might have been of some assistance in this regard in the normal course it was found that the changes were so frequent that no-one ever managed to compile a definitive listing or ranking of suppliers. In other words it was impossible to establish which supplier was, for example, included in the 3rd Tier let alone whether they had a “Known Dependency Value”. This was just one factor which would make the difference between the appropriate limit of liability being either €2.5m as opposed to €200m.

However, this was perhaps not the most significant issue. I have already alluded to the Tōhoku earthquake and tsunami posing questions on contingent business interruption losses which have never been posed before and when the coverage in this slide is set out diagrammatically we can see the enormity of the problem.

Slide 23

Firstly, I should say that I am indebted to Mr Paul Isaac of accounting consultants Matson Driscoll & Damico for this slide. It is the result of his analysis of the policy coverage we have just seen.

My apologies if the slide is less than distinct but it does illustrate the complexity of the situation. The “Map” is of course a representation of the coverage but in theory it would be possible to fill in all of these squares with actual names.

If we take just the “South” quadrant of the slide we can see that three “Tiers” of supplier are involved before the insured incorporates the component or components into its product. What is important though are the boxes coloured yellow and labelled “concurrent issue”. This does of course refer to circumstances or contingencies which have impacted the supply chain but which are not insured perils. As we can see the sub-supplier of a component (green box and probably a “Tier 2” supplier) has been so affected. Let us bear this in mind as we go to the next slide.

Slide 24

I believe that these then are the central issues which now face us in a catastrophe situation in an industrialised country devastated by an event over a large area.

The first two of these points are probably capable of being addressed with a degree of certainty.

Given sufficient information about the supply chain (and assuming that it does not change with alarming speed) then the insured and insurers should be able to agree between themselves just how any supplier etc. fits into the policy definitions. This should just be a practical issue at the end of the day.

Likewise it should be straightforward to determine what impact the event has had upon the supplier. In other words, what has affected them and what can they now do (or not do) in terms of contributing to the insured’s supply chain.

What is more complicated is the third of these points and we have already seen the difficulties associated with “Fire Following Earthquake” for example.

However, it is the last of these points which is the most problematical.

Again within the context of the Japanese earthquake we know that there was massive disruption to supply chains due to logistical difficulties associated with road and bridge closures, power outages, shortages of labour as employees dealt with their own concerns and in some cases due to the Fukushima nuclear exclusion zone.

It is fair to assume that none of these reasons for disruption or interruption constitute insured perils. If they do not then how can the policy respond?

Even more importantly though is the question:

> "What is the policy response if the supplier of the smallest component has been affected by an excluded peril and this in turn brings the insured's production to a standstill?"

There would seem to be at least three possible answers:

1. No coverage exists as the loss flows from damage which is excluded under the policy.

   Or

2. Coverage commences at the next supplier in the chain that has suffered damage which is covered under the policy.

   Or

3. Coverage exists because the supply chain has been disrupted somewhere to some degree by an insured peril and it is the effect on the insured's ability to produce that is the overriding consideration.

The difficulties are plain for us all to see. As I am sure you can appreciate there is any number of variables or combinations involved which I have not mentioned in order not to confuse matters. The point is that policy wordings give us no real guidance and no-one has ever faced this problem before on this scale. In some cases it has been necessary to not only look at the effects of the Japanese event but then also take into account the effects of the flooding in Thailand some six months later. I know of one case where having suffered from both of these occurrences the insured then had a catastrophic fire in a major distribution warehouse adding even greater complexity to their predicament!

Slide 25

So what then can we conclude from this?

I think the following;

- Catastrophes are inevitable and there is only so much that anyone can do to protect themself.

- With increasingly complicated supply chains in cutting-edge globalised industries business interruption risks are increasing.

- Additional study should be undertaken by all parties at the commencement of a risk to understand its nature, its extent and to highlight any critical path issues.

- The coverage placed should be transparent to all parties and realistically reflect the risk. It is most likely that a multi-national company will need a bespoke policy.

- The tragic events of 2011 have shown all of us that we can do much better even if there are questions that remain unanswered.

Thank you for listening. I'm happy to try and answer any questions you may have.

Slide 26